What is claimed is

1. A method for detecting the specificity of activated lymphocytes in the organism, comprising the steps of:

1) diluting antigen(s) by medium, wherein the antigen can activate lymphocytes in body, and wherein the medium contains, in addition to regular ingredients of cell culture, neutralizing antibodies against cytokines which can induce cell proliferation, and/or cytokines which induce mononuclear cell apoptosis or inhibit cell activation or inhibit cell proliferation;

2) preparing mononuclear cell suspension with the medium, wherein the suspension contains activated lymphocytes to be tested;

3) incubating the mixture of antigen and the above suspension containing the activated lymphocyte on cell culture plate; and

4) determining the existence of antigen–specific activated lymphocyte by comparing the differences of detectable signals between test wells and control wells.

2. The method of claim 1, wherein the antigen(s) are selected from human histocompatibility antigens, allogeneic antigens, heteroantigens, viral antigens, or bacterial antigens.

3. The method of claim 2, wherein the antigen(s) are particulate antigens or soluble antigens; and wherein the human histocompatibility antigens are either one of the HLA type I or type II antigens, or a mixture of HLA type I antigens and HLA type II antigens.

4. The method of claim 1, wherein the medium further comprises immunosuppressive agents and/or anti-cancer medicaments, the amount of the immunosuppressive agents or anti-cancer medicaments used being 0.001 ng-100 μg/ml medium; the amount of the cytokine neutralizing antibody used being 1 μg-10 mg/ml medium; and the amount of the cytokines used which induce mononuclear cell apoptosis or inhibit cell activation or inhibit cell proliferation being 0.01-1000 activity unit/ml medium.

5. The method of claim 1, wherein the detectable signals are signals which can

reflect cell activity changes in the wells.

6. The method of claim 4, wherein the immunosuppressive agents are selected from Prograf, Cyclosporins, cyclophosphamide, azathioprine, rapamycin, RS-61443, BQR, immunosuppressant secreted by human acute T lymphocytic leukemia cell strain JM, deoxyspergualin, and adrenal cortex hormone, and wherein the anti-cancer medicaments are selected from topoisomerase inhibitor, alkyling agent, antimetabolite, derivatives of retinoic acids-vitamin A, and other medicaments which are potentially capable of inducing immunosuppressive function or inducing tumor cells apoptosis.

7. The method of claim 6, wherein the immunosuppressive agents and the anti-cancer medicaments are used alone or in combination.

8. The method of claim 6, wherein the adrenal cortex hormone is selected from medrat, prednisone, hydrocortisone, or dexamethasone.

9. The method of claim 6, wherein the Cyclosporins is selected from Cyclosporin A or Cyclosporin C.

10. The method of claim 4, wherein the cytokines which can stimulate cell proliferation are selected from interleukin 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23, α-interferon, β-interferon, ω-interferon, γ-interferon, granulocyte colony-stimulating factor, macrophage colony stimulating factor, granulocyte-macrophage colony stimulating factor, stem cell factor, or thrombopoietin .

11. The method of claim 4, wherein the cytokines, which can inhibit mononuclear cell activation and cell proliferation is selected from IL-2, IL-4, IL-10, IL-15, or transforming growth factor β.

12. A medium used to detect the specificity of activated lymphocyte, wherein the medium comprises, in addition to regular ingredients of cell culture, immunosuppressive agents and/or anti-cancer medicaments, neutralizing antibodies against the cytokines which can induce cell proliferation, and/or cytokines which inhibit cell activation or inhibit cell proliferation.

13. The medium of claim 12, wherein the amount of the immunosuppressive agents

used is 0.001 ng-100 μg/ml medium.

14. The medium of claim 12, wherein the amount of the cytokine neutralizing antibody used which can induce cell proliferation is 1 μg-10 mg/ml medium.

15. The medium of claim 12, wherein the amount of the cytokines used which inhibit mononuclear cell activation or cell proliferation is 0.01-1000 activity unit/ml medium.

16. The medium of claim 14, wherein the cytokine neutralizing antibodies are used alone or in combination.

17. The medium of claim 14 or 15, wherein the cytokine neutralizing antibodies and the cytokines which inhibit mononuclear cell activation or cell proliferation are used alone or in combination.

18. The medium of claim 13, wherein the immunosuppressive agents are selected from Prograf, Cyclosporins, cyclophosphamide, azathioprine, rapamycin, RS-61443, BQR, deoxyspergualin, and adrenal cortex hormone, and wherein the anti-cancer medicaments are selected from, topoisomerase inhibitor, alkyling agent, antimetabolite, derivatives of retinoic acids-vitamin A, and other medicaments which are potentially capable of inducing immunosuppressive function or inducing tumor cells apoptosis.

19. The medium of claim 18, wherein the immunosuppressive agents and the anti-cancer medicaments are used alone or in combination.

20. The medium of claim 18, wherein the adrenal cortex hormone is selected from medrat, prednisone, hydrocortisone, or dexamethasone.

21. The medium of claim 18, wherein the Cyclosporins is selected from Cyclosporin A or Cyclosporin C.

22. The method of claim 14, wherein the cytokines which can stimulate cell proliferation is selected from interleukin 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23, α-interferon, β-interferon, ω-interferon, γ-interferon, granulocyte colony-stimulating factor, macrophage colony stimulating factor, granulocyte-macrophage colony stimulating factor, stem cell factor, or thrombopoietin.

23. The method of claim 15, wherein the cytokines which can inhibit mononuclear

cell activation and cell proliferation is selected from IL-2, IL-4, IL-10, IL-15, transforming growth factor β, or tumor necrosis factor.

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